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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 6  
Application Number 10/055,301  
Filing Date 01/23/2002  
First Named Inventor James G. Sheek  
Art Unit 1762 1775  
Examiner Name  
Attorney Docket Number 1018-0729

## U.S. PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
JZ		5,976,634		Tanner et al.	11-02-1999	
		5,897,753		Schatz et al.	04-27-1999	
		5,891,556		Anderson et al.	04-06-1999	
		5,879,532		Foster et al.	03-09-1999	
		5,858,181		Jindal et al.	01-12-1999	
		5,798,148		Thomas et al.	08-25-1998	
		5,788,823		Warnes et al.	08-04-1998	
		5,773,154		Takada	06-30-1998	
		5,720,821		Halpern	02-24-1998	
		5,705,230		Matanabe et al.	01-06-1998	
		<del>5,683,756</del>		<del>5,683,756</del>	<del>11-04-1997</del>	
		5,683,756		Tanner et al.	11-04-1997	
		5,624,486		Schmid et al.	04-29-1997	
		5,543,183		Streckert et al.	08-06-1996	
		5,512,164		Timberlake	04-30-1996	
		5,510,012		Schulz et al.	04-23-1996	
		5,492,725		Gordon	02-20-1996	
		5,458,754		Sathrum et al.	10-17-1995	
		5,447,803		Nagaoka et al.	09-05-1995	
		5,429,070		Campbell et al.	07-04-1995	

## FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
JZ		EP	0 430 874	A1	Balzars AG	06/05/1991		
		EP	0 353 060	A2	Nippon Steel Corp.	01/31/1990		
		GB	2 173 218	A	Citizen Watch Co. Ltd.	10/08/1986		
		JP	03 240 942		Inax Corp.	10/28/1991		

Examiner Signature

JOHN J. ZIMMERMAN

Date

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<b>Application Number</b>	10/055,301
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<b>First Named Inventor</b>	James G. Sheek
<b>Art Unit</b>	1762-1777
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	1018-0729

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		Number	Kind Code² (if known)			
13		5,458,928		Kiyama et al.	10-17-1995	
		5,407,548		Kopacz et al.	04-18-1995	
		5,374,451		Servais et al.	12-20-1994	
		5,366,764		Sunthankar	11-22-1994	
		5,234,561		Randhawa et al.	08-10-1993	
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		5,126,030		Tamagaki et al.	06-30-1992	
		5,091,209		Claverie et al.	02-25-1992	
		5,055,318		Deutschman et al.	10-08-1991	
		5,022,978		Hensel et al.	06-11-1991	
		5,015,308		Yamagata	05-14-1991	
		Re. 33,530		Munz et al.	02-05-1991	
		4,973,388		Francois et al.	11-27-1990	
		4,950,365		Evans	08-21-1990	
		4,937,094		Doehler et al.	06-26-1990	
		4,911,811		Mullaney, Jr.	03-27-1990	
		4,900,630		Suzuki et al.	02-13-1990	
13		4,895,630		Aufderheide	01-23-1990	
		4,882,022		Hoffman et al.	11-21-1989	
		4,876,119		Takeda et al.	10-24-1989	

[illegible]

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Sheet 3 of 6

<b>Application Number</b>	10/055,301
<b>Filing Date</b>	01/23/2002
<b>First Named Inventor</b>	James G. Sheek
<b>Art Unit</b>	1762-1772
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	1018-0729

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cita No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
13		4,849,082		Baty et al.	07-18-1989	
		4,842,945		Ito et al.	06-27-1989	
		4,824,540		Stuart	04-25-1989	
		4,763,601		Saida et al.	08-16-1988	
		4,737,252		Hoffman	04-12-1988	
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		4,713,150		Hornbostel et al.	12-15-1987	
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		4,620,913		Bergman	11-04-1986	
		4,612,216		Kurzman	09-16-1986	
		4,606,941		Jenkin	08-19-1986	
		4,604,168		Liu et al.	08-05-1986	
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		4,590,031		Eichen et al.	05-20-1986	
		4,582,564		Shanefield et al.	04-15-1986	
		4,544,468		Munz et al.	10-01-1985	
	4,524,106		Flasck	06-18-1985		
12		4,517,217		Hoffman	05-14-1985	
		4,470,895		Coad et al.	09-11-1984	

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Filing Date 01/23/2002

First Named Inventor James G. Sheek

Art Unit 1762 1775

Examiner Name

Attorney Docket Number 1018-0729

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## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
1/3		4,466,872		Einbinder	08-21-1984	
		4,447,473		Mashida et al.	05-08-1984	
		4,438,153		Pinkhasov	03-20-1984	
		4,431,711		Eisfeller	02-14-1984	
		4,426,267		Munz et al.	01-17-1984	
		4,420,498		Hirose et al.	12-13-1983	
		4,415,421		Sasanuma	11-15-1983	
		4,407,998		Duvdevani	10-04-1983	
		4,402,998		Kumagai et al.	09-06-1983	
		4,395,313		Lindsay et al.	07-26-1983	
		4,369,225		Manabe et al.	01-18-1983	
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		4,296,178		Griesenauer et al.	10-20-1981	
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		4,209,552		Welch	06-24-1980	
		6,221,231		Foster	04-24-2001	
		6,143,424		Jonte et al.	11-07-2000	
		5,985,468		Sugg et al.	11-16-1999	
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		5,759,677		Fink	06-02-1998	

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Application Number 10/055,301  
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First Named Inventor James G. Sheek  
Art Unit 2762-1775  
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Attorney Docket Number 1018-0729

Sheet 5 of 6

## U.S. PATENT DOCUMENTS

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		Number	Kind Code <sup>2</sup> (if known)			
3		5,814,415		Moysan, III et al.	09-29-1998	
		5,783,313		Moysan, III et al.	07-21-1998	
		5,716,721		Moysan, III et al.	02-10-1998	
		5,693,427		Moysan, III et al.	12-02-1997	
		5,667,904		Moysan, III et al.	09-16-1997	
		5,654,108		Moysan, III et al.	08-05-1997	
		5,648,179		Moysan, III et al.	07-15-1997	
		5,641,579		Moysan, III et al.	06-24-1997	
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		5,484,663		Moysan, III et al.	01-16-1996	
		5,482,788		Moysan, III et al.	01-09-1996	
		5,478,660		Moysan, III et al.	12-26-1995	
		5,478,659		Moysan, III et al.	12-26-1995	
		5,476,724		Moysan, III et al.	12-19-1995	
		5,413,874		Moysan, III et al.	05-09-1995	
		5,752,395		Nakamura	05-19-1998	
		4,919,773		Naik	04-24-1990	
		3,958,070		Schintlmeister et al.	05-18-1976	

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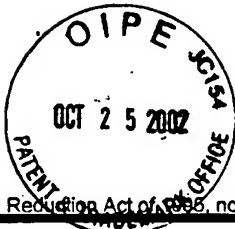
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Art Unit	1762 1775
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Attorney Docket Number	1018-0729

Sheet 6 of 6

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JS		SCHULZ, S., "Decorative Coating with Physical Coating Processes," Leybold AG Technical Pubn. 11-S36.02, Hanau, Germany	
JS		SCHULZ, S., "New Directions in Decorative Hard Coatings," Leybold AG Technical Pubn. 11-S37.02 presented at Dec8-Symposium Japan, Kyoto, Japan, 07.12.1990, Hanau, Germany	
JS		SCHULZ, S., "What You Ever Wanted to Know About Deco Coatings," Leybold AG Newsletter, Alzenau, Germany, Feb. 1991	
JS		BROWN, Richard, and ALIAS, Mohd. N.: "Oxidation of Nitride Films in Aqueous Solution: Correlation Between Surface Surface Analysis and Electrochemical Studies," University of Rhode Island Paper No. 322, presented at the Annual Conference and Corrosion Show, 1994	
JS		VAN LEAVEN, L., ALIAS, M.N. and BROWN, R.: "Corrosion Behavior of Ion Plated and Implanted Films," Surface and Coatings Technology, 53 (1992) pp. 25-34	
JS		RISTOLAININ, E.O., MOLARIUS, J.M., KORHONEN, A.S., and LINDROOS, V.K., "A Study of Nitrogen-rich Titanium and Zirconium Nitride Films," J.Vac.Sci.Technol.A Vol.5 No.4 July/Aug 1987 (pp. 2184-89), USA	
JS		JOHANSSON, B.O., HENTZELL, H.T.G., HARPER, J.M.E. and CUOMO, J.J., "Higher Nitrides of Hafnium, Zirconium, and Titanium Synthesized by Dual Ion Beam Deposition," J. Mater.Res., Vol. 1, No. 3, May/June 1986, pp. 445-451, USA	
JS		JEHN, Von H.A., PFEIFER-SCHALIER, I., and BAUMGARTNER, M.E., "Corrosion of Hard Coatings," Galvanotechnik 84 (1993) Nr. 12, pp. 4059-4964, Saulgau, Germany	✓

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